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LONG POND.

C. A. WEATHERBY.

PROFESSOR FERNALD maintains that there is especial virtue in the appellation "Long Pond"; that any body of water bearing that name is pretty sure to harbor, in or about it, desirable plants; and that a composite flora of "Long Ponds" would make interesting reading. It is as a contribution to such a work that I offer the following account of my own particular Long Pond.

In October, 1916, in the course of a tramp through the woods in the extreme northeastern corner of Connecticut, in the town of Thompson, Mrs. Weatherby and I noticed a small pond, surrounded by broad margins of swamp and producing in its shallower parts a rank growth of sedges. It looked good; and we then and there resolved to visit it again at a more favorable season for botanizing.

The immediate region in which it lies consists of low ridges and small, flat areas of sand and gravel, presumably the bars and deltas of glacial streams. The hollows between them are occupied by swamps and by two small ponds, drained by streams which flow sluggishly through wide stretches of marsh, full of *Peltandra*. One of these ponds — Little Pond — we had already visited. It has a clean sandy strand, only here and there overlaid with a thin deposit of vegetable matter, and inhabited by such characteristic plants as *Gratiola aurea*, *Cyperus dentatus*, *Juncus pelocarpus*, *Elatine minima* and, in the more mucky places, *Hydrocotyle umbellata*, *Utricularia gibba* and *Sagittaria Engelmanniana*. The swamps along its outlet were known to harbor *Rosa nitida*, *Rynchospora fusca* and *Eleocharis tuberculosa*.¹ In the maple

¹ The last two species are associated with each other and with *Panicum spretum* (which also grows in Thompson) in at least two other Connecticut swamps.

swamps between the ridges scattered individuals of tamarack and black spruce persist from an earlier growth. Some specimens of the latter are fifteen to twenty feet high — a very good size for Connecticut. Most of the plants here mentioned are noteworthy in this region: it was, therefore, with anticipations which we tried to keep prudently chastened that, in August, 1918, we at last started on our expedition to Long Pond.

War-time train service had made the locality difficult of access. The best way to reach it and have a few clear hours there seemed to be to take an afternoon train to the nearest railroad station, walk in, carrying what we needed, to an old farm clearing near the pond, spend the night in the fields there and do our botanizing the next morning. This we accordingly did. It was a novel experience for us, but proved distinctly entertaining. The one real drawback was a lack of drinking water, for finding which we had trusted to luck. By morning we were driven to a desperate attempt to collect dew from the grass, where there seemed to be enough of it to slake the thirst of an army. The attempt failed; but it led to the interesting scientific discovery that a dewdrop is by no means the crystal pure article the poets would have us believe it. On the contrary, it is a globule of incredibly dirty water: its primary function must be to relieve the atmosphere of all — positively all — its impurities.

At breakfast, we were honored by a visit from a mink, which moved about at a safe distance and barked at us. We suspected him of jeering at our waterless condition: he knew where the water was. Later we found out; and, much refreshed, began our botanizing.

Rhexia virginica grew sparingly at the edge of the clearing where we had camped. A few rods away, in the edge of the swamp, was a good-sized patch of *Smilacina trifolia*, a species not previously reported from Windham County. Long Pond itself, when we reached it, proved to be quite different in character from Little Pond. All around it ran a more or less broad belt of mucky swamp, grown up to a well-nigh impenetrable tangle of bushes and sedge, among which young red maples were beginning to creep in. At one point where firm ground came close to the water, a path led down to it. Here we found a boat, of the awkward flat-bottomed type usual on New England ponds, and half an oar. Fortunately, it was the business half. As no better equipment seemed available, we set forth with this, in the face of a rather lively breeze. After some three hours'

hard labor, we had succeeded in circumnavigating about half the pond — which is half a mile long — and were quite ready to go ashore and have lunch.

But the botanizing was good. Not one of the plants noted as characteristic of Little Pond was found here, the different conditions at the two being well reflected in their floras. On the black mud where the boat was drawn up was a mat of *Eleocharis olivacea*, not before reported from Windham County. In the shallower parts of the pond was an abundant growth of aquatics — white and yellow water-lilies, *Brasenia*, *Nymphoides* (sometimes called “fairy lily” in Connecticut), *Najas flexilis*, *Utricularia vulgaris*, var. *americana*, *U. purpurea* in abundance and *Potamogeton natans*, the last two new to the county. Near the further shore, slender culms of *Scirpus subterminalis* and *Eleocharis Robbinsii* projected from the water — both likewise new to Windham County. Here also were scattered plants of *Pontederia cordata*, var. *angustifolia*. Only the variety was observed in the pond itself, though there was an abundance of the typical form along the outlet. In the edge of the marginal swamp grew many plants of a pretty and unfamiliar *Aster*, which we managed to collect by driving the bow of the boat (if a craft with perfectly interchangeable ends can be said to have a bow) as far as possible into the bushes, and which, on later investigation, proved to be *Aster nemoralis*, previously collected near Long Pond by Mr. E. B. Harger in June, 1908, but not reported because his specimens were too young for certain identification. Further along, we picked a single fruiting head of *Juncus militaris*, another addition to the Windham County list. Around it were numerous jointed culms which I took to be sterile plants of the *Juncus*. We set about hunting for more flowering or fruiting material. Presently Mrs. Weatherby remarked: “Here is a flower on one of these things.” I looked around, and probably only the limitations of the boat prevented my doing something undignified. There is a keenness of pleasure in the finding of a really rare plant which one never quite outgrows. And this flower was not that of a *Juncus*, but of an *Eleocharis* and the thick, jointed culm on which it grew could belong only to *E. interstincta*, a species not only new to Connecticut, but known from only three other places in New England.

If this be boasting, it is boasting of the locality, not of the collectors; and it is also an invitation. Only half of Long Pond has been explored; when we last saw it, the boat and the half oar were waiting. And

the pond lies in a belt of more or less similar country which apparently extends along the western border of Rhode Island all the way from Westerly to a point near Webster, Massachusetts. Any part of it is likely to repay exploration.

EAST HARTFORD, CONNECTICUT.

BROMELICA (THURBER): A NEW GENUS OF GRASSES.

OLIVER ATKINS FARWELL.

FOR some years past our eastern species of Oat Grass have been bandied about between *Avena* and *Melica*, affording for some a merry game of shuttlecock. These species appear to have no permanent home and to be a restless group, that, like Banquo's Ghost, will not down. It seems best, therefore, to create a new genus for them. At least one of that small group of grasses, to which belong our eastern Oat Grasses, has been included at one time or another in five different genera, *Festuca*, *Bromus*, *Melica*, *Avena* and *Trisetum*. As regards our eastern species Michaux first described *Avena striata* in 1803; Torrey next described it as *Trisetum purpurascens*; A. Gray replaced it in *Avena* using Michaux's name; Hitchcock then removed it to *Melica* as *M. striata*; finally Nash restored it to *Avena* as *A. Torreyi*. The second species was described by Porter in 1867 as *Avena Smithii* and it was removed to *Melica* by Vasey in 1888. At the present time Hitchcock, in Gray's Manual, lists these species under *Melica*; Britton & Brown in the Illustrated Flora list them under *Avena*; Rydberg in the Flora of the Rocky Mountains steers an intermediate course listing the first under *Avena* and the second under *Melica*. When authors are at such wide variance with each other in their treatment of such closely related species, the probabilities are that the species do not belong to any one of the genera to which they have been referred. A careful analysis of the distinguishing characters of each genus bears out this supposition.

These species can scarcely belong to *Avena* since they lack the most important *tribal characters* distinctive of the *Aveneae*, viz.: the spine-like end of the rachilla prolonged behind the uppermost floret and glumes *longer* than the lower floret. They do agree with the *Festuceae*

in not possessing the spine-like elongation of the rachilla and in having glumes shorter than the lower floret. A genus of the *Festuceae* must then be sought for these species and amongst those genera having many nerved lemmas. They do not belong to *Festuca* because the lemmas are *not entire*. They do not belong to *Bromus* because the grain is *not adherent to the palet nor pubescent* at the summit. They do not belong to *Melica* because the lemmas are *not subcoriaceous* and the uppermost *do not form a convolute club-shaped mass* but are *distinct*. In *Bromelica* the glumes and lemmas are *membranous*, the former being somewhat *unequal and shorter* than the lowest floret; the latter are *acute, notched or bidentate*, generally with a *terminal awn* formed by the excurrent midrib between the teeth, the uppermost being *similar to the others and distinct*, the uppermost floret consisting of a single lemma only. Thus delimited, *Melica* and *Bromelica* consist, each of a clear, homogeneous group of species; united, *Melica* is a heterogeneous group. *Bromelica* is almost exactly intermediate between *Melica* and *Bromus*, with closer relationship to the latter than to the former, which is exemplified by habit and by the characters of the glumes and lemmas; if *Bromelica* is retained in *Melica* there is no good reason why *Melica* in its entirety should not be united with *Bromus*.

Lemmas membranous, all alike and distinct, acute, awned or awnless.

Lemmas entire. *Festuca*.

Lemmas notched or bidentate.

Grain adherent to the palet and pubescent at apex. *Bromus*.

Grain free, not pubescent. *Bromelica*.

Lemmas subcoriaceous, obtuse, convolute around each other and forming a club-shaped mass. *Melica*.

The synonymy and species follow:

BROMELICA (Thurber), n. gen. *Melica* subgenus *Bromelica* Thurber, Bot. Calif. ii. 304 (1880), and in Gray's Manual, ed. 6, 152 (1908).

B. striata (Mx.), n. comb. *Avena striata* Mx. Fl. Bor. Am. i. 73 (1803). *Trisetum purpurascens* Torr. Fl. U. S. 127 (1824). *Melica striata* (Mx.) Hitchc. RHODORA, viii. 211 (1906). *Avena Torreyi* Nash in Britt. & Br. Illus. Fl. ed. 2, i. 219 (1913).

B. Smithii (Porter), n. comb. *Avena Smithii* Porter in Gray's Manual, ed. 5, 640 (1867). *Melica Smithii* (Porter) Vasey, Bull. Torr. Cl. xv. 294 (1888).

B. aristata (Thurber), n. comb. *Melica aristata* Thurber in Boland. Proc. Cal. Acad. iv. 103 (1870).

B. subulata (Bong.), n. comb. *Festuca subulata* Bong. Veg. Sitch. 173 (1832). *Bromus subulatus* Griseb. in Ledeb. Fl. Ross. iv. 358 (1853). *Melica acuminata* Boland. Proc. Cal. Acad. iv. 104 (1870). *M. subulata* Scribn. Proc. Acad. Phila. 47 (1885).

B. Harfordii (Boland.), n. comb. *Melica Harfordii* Boland. Proc. Cal. Acad. 47 (1885).

B. HARFORDII, var. **minor** (Vasey), n. comb. *Melica Harfordii*, var. *minor* Vasey, Bull. Torr. Cl. xv. 48 (1888). *M. Harfordii*, subsp. *tenuior* Piper, Cont. U. S. Nat. Herb. xi. 127 (1906).

B. Geyeri (Munro), n. comb. *Melica Geyeri* Munro in Boland. Proc. Cal. Acad. iv. 103 (1870). *M. bromoides* Boland. ex A. Gray, Proc. Am. Acad. viii. 409 (1872).

B. GEYERI, var. **Howellii** (Scribn.), n. comb. *Melica bromoides*, var. *Howellii* Scribn. Proc. Acad. Philad. 47 (1885).

DEPARTMENT OF BOTANY, PARKE, DAVIS & Co.,
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REPORTS ON THE FLORA OF THE BOSTON DISTRICT,—XXX.

LINACEAE.

LINUM.

L. medium (Planch.) Britton. Dry soil, ten scattered stations, none in Essex county.

L. striatum Walt. Rock Pond, Georgetown (*Mrs. C. N. S. Horner*, no date); Cedar Swamp, Peabody (*J. H. Sears*, July 12, 1887); Essex Woods (*J. H. Sears & J. Robinson*, September, 1880); old railway track under Elm St., Dedham (*K. M. Wiegand & Margaret Heatley*, July 23, 1908).

L. sulcatum Riddell. Middlesex Fells (*F. S. Collins*, Aug. 8, 1885); roadside, Winchester (*W. Boott*, Sept. 13, 1868; *C. W. Jenks & C. W. Swan*, July 19, 1890); Boston (*F. Boott*, —, 1822).

L. USITATISSIMUM L. Roadsides and waste places, frequent.

L. virginianum L. Dry gravelly and sandy soil; well distributed, especially southward.

OXALIDACEAE.

OXALIS.

O. americana Bigel. (*O. Acetosella* L. of American authors. See RHODORA xx. 76, 1918). Salisbury (*R. Dodge*, Aug. 12, 1890); moist rich woods, Concord (*Horace Mann*, —, 1862; introduced by Minot Pratt, see RHODORA i, 170, 1899); Purgatory Swamp, Norwood (*F. S. Collins & C. W. Swan*, June 18, 1883).

O. corniculata L. (*O. repens* Thunb. of Gray's Manual, 7th Ed.). A rare weed, in garden at Andover (*A. S. Pease*, July 4, 1902); abundant in greenhouses at Cambridge, Dorchester, Wellesley and Easton.

O. europaea Jord. (*O. corniculata* L. of Gray's Manual, 7th ed. See No. 227, *Plantae Exsiccatae Grayanae*.) Fields, gardens and waste places, very common throughout.

O. filipes Small. Dry soil, rare; Wayland, Sherborn, Milton, Walpole.

O. stricta L. Dry or sandy soil, occasional (eleven stations).

O. violacea L. Open woods and ledges, rare; Ipswich (*Wm. Oakes*), Belmont, Waltham, Weston, Arlington, Lincoln, Concord.

GERANIACEAE.

ERODIUM.

E. BOTRYS Bertol. Introduced in wool-waste; Tewksbury (*E. F. Williams, B. L. Robinson & W. P. Rich*, Nov. 4, 11, 1900); Westfield (*C. W. Swan*, no date); Boston (*D. Murray*, —, 1863). Native of southern Europe.

E. CICONIUM (L.) Ait. Wool-waste dump, Westford (*Miss E. F. Fletcher*, June 26, 1913 et seq. Specimen in herb. Gray). See RHODORA xv. 172, 1913. Native of Mediterranean region and the Orient.

E. CICONIUM (L.) Ait., var. **TENUISECTUM** Nym. Woolwaste dump, Westford (*Miss E. F. Fletcher*, —, 1915. Specimen in herb. Gray). There are not any European specimens of this variety in the Gray Herbarium, but these specimens fit the published description. See

RHODORA xviii. 143, 1916. Native of southern France and Spain.

E. CICUTARIUM (L.) L'Hér. Waste places, especially near woollen mills, occasional.

E. LACINIATUM (Cav.) Willd., var. *BOVEI* (Delile) Murbeck. Wool-waste dump, N. Chelmsford (*Miss E. F. Fletcher*, Sept. 5, 1917. Specimens in herb. Gray and N. E. Botanical Club). See RHODORA xx. 20, 1918. A native of Egypt, Tunis and Algiers.

E. MALACOIDES Willd. Millyard, north side of Merrimac river, Lawrence (*A. S. Pease*, July 9, 1902. Specimen in herb. N. E. Botanical Club). Native of Mediterranean countries.

E. MOSCHATUM (L.) L'Hér. Waste places, especially near woollen mills, rare (eight stations).

E. STEPHANIANUM Willd. Woolwaste at Westford (*Miss E. F. Fletcher*, July-August, 1916. Specimen in herb. Gray). See RHODORA xix. 132, 1917. An Asiatic species, ranging from the Caucasus to southern China.

GERANIUM.

G. Bicknellii Britton. Open woods and clearings, occasional.

G. carolinianum L. Dry sandy and rocky soil; frequent.

G. DISSECTUM L. Dump, Centralville, Lowell (*C. W. Swan*, Aug. 4, 1884. Specimen in herb. N. E. Botanical Club). Native of Europe, northern Asia and Australia.

G. maculatum L. Fields and meadows, very common throughout.

G. MOLLE L. Sporadic in new grassland, at Lexington, Cambridge, Dorchester and Wellesley.

G. PRATENSE L. Meadow at Swampscott, perhaps 50 plants (*L. A. Wentworth*, June 26, 1903. Specimen in herb. Gray). See RHODORA v. 256, 1903.

G. PUSILLUM Burm. f. Waste places and gardens; Andover (*A. S. Pease*, July 21, 1901); Wellesley (*F. W. Hunnewell*, Aug. 29, 1912); Sherborn (*Martha L. Loomis*, May 29, 1913); Lexington, according to M. P. Cook, RHODORA i. 81, 1899.

G. Robertianum L. Rich rocky woods; common, except possibly in the most southern towns.

G. SIBIRICUM L. Waste heap, Cambridge (*T. Morong*, July 27, 1885. Specimen in herb. W. Deane).

RUTACEAE.**PTELEA.**

P. TRIFOLIATA L. Waste places; Medford, Somerville, Boston, Roxbury, Dorchester, Dedham, Hingham, Newton, Wellesley. Introduced from further south.

ZANTHOXYLUM.

Z. americanum Mill. Roadsides and old places, north and west of Boston. Probably introduced at most if not all stations.

SIMARUBACEAE.**AILANTHUS.**

A. GLANDULOSA Desf. Persistent and spreading, occasional.

POLYGALACEAE.**POLYGALA.**

P. cruciata L. Meadows and swamps; not reported from western towns, but occasional throughout the towns nearer the coast.

P. Nuttallii T. & G. Old spur track, Sharon (*E. F. Williams*, Sept. 10, 1899. Specimens in herb. Gray and N. E. Botanical Club).

P. paucifolia Willd. Woods and open places; unevenly distributed but abundant, especially in southwestern towns. White form, forma **alba** Wheelock (Mem. Torr. Bot. Club. ii. 142, 1891) at Concord (Dame & Collins, Fl. Middlesex Co. 23, 1888; A. W. Hosmer, *RHODORA* i. 173, 1899); violet form at Sudbury (A. W. Hosmer, *RHODORA* i. 173, 223, 1899).

P. polygama Walt. Dry sandy and rocky soil; common except in northern Middlesex Co.

P. polygama Walt., forma **pallida** Britton. Sandy margin of Winter Pond, Winchester (*M. L. Fernald & Bayard Long*, June 22, 1913. Specimen in herb. N. E. Botanical Club).

P. sanguinea L. Swamps and fields, common throughout; "often varying to white" (*J. Robinson*, Fl. Essex Co. 44, 1880). This is forma **albiflora** Millsp. Fl. W. Va. 333, 1892.

P. verticillata L. Dry soil, common.

P. verticillata L., var. **ambigua** (Nutt.) Wood. This extreme form is apparently very rare, but forms tending toward it are occasional.

EUPHORBIACEAE.

ACALYPHA.

A. gracilens Gray. Dry soil, frequent.

A. virginica L. Fields and waste places, common.

CROTON.

C. CAPITATUS Michx. S. Boston flats (*C. E. Perkins*, Aug. 27, 1879. Specimen in herb. N. E. Botanical Club). Waif from the West.

C. TEXENSIS (Klotzsch) Muell. Arg. Filled land, Back Bay, Boston (*C. W. Swan*, Sept. 9, 1890. Specimens in herb. Gray and Yale). Waif from the Southwest.

EUPHORBIA.

E. COROLLATA L. Sparingly introduced at Lowell, Concord, Wellesley, Natick and Sherborn.

E. CYPARISSIAS L. Cemeteries, fields and roadsides, common throughout.

E. ESULA L. Fields and waste places; very abundant in Salisbury, Amesbury, Newburyport, Rowley and Newbury; Ipswich (*Wm. Oakes*), also sporadic at Somerville, Boston and West Roxbury.

E. HELIOSCOPIA L. Waste places at Melrose, Somerville, Cambridge, Roxbury and Scituate.

E. hirsuta (Torr.) Wiegand. Dry sand, especially by railways; Lowell, Concord, Ayer, Cambridge, S. Boston, Wellesley, Natick.

E. maculata L. Dry sand and gravel, very common throughout.

E. MARGINATA Pursh. Vacant lot, Boylston St., Boston, now extinct (*W. P. Rich*, Aug. 24, 1879. See *RHODORA* x. 152, 1908); waste place by (or in) salt marsh, a few plants (*F. W. Grigg*, Aug. 9, 1913. Specimens in herb. *F. W. Grigg*).

E. PEPLUS L. Waste places and gardens; sporadic at Salem, Woburn, Somerville and Lynn; Tremont St., Boston (*W. Boott*, Sept. 11, 1853).

E. PLATYPHYLLA L. Rubbish heap, not persistent, Cambridge (*W. Deane*, Oct. 10, 1885).

E. polygonifolia L. Seashore sands from Salisbury to Duxbury.

E. Preslii Guss. Sandy soil and waste places, rare (twelve stations).

E. PROSTRATA Ait. Cotton waste, Malden (*F. S. Collins*, Sept. 20, 1890. Specimen in herb. N. E. Botanical Club). Native of tropical America.

MERCURIALIS.

M. ANNUA L. Newburyport ("E. U." 1880); E. Somerville freight-yards (*A. S. Pease & A. H. Moore*, Oct. 20, 1903); Boston (*J. A. Lowell*, no date); yard, Newtonville (*F. W. Grigg*, Aug. 24, 1912).

RICINUS.

R. COMMUNIS L. Dump, Cambridge (*M. L. Fernald*, Sept. 26, 1908); railway dump, Dedham (*Sydney Harris*, Aug. 22, 1897; *E. F. Williams*, Oct. 2, 1898).

C. H. KNOWLTON } *Committee on*
WALTER DEANE } *Local Flora.*

CAREX NOTES.

IRA W. CLOKEY.

CAREX arapahoensis, spec. nov. Growing in small clumps; the culms stiffly erect, rather stout, 2-4 dm. high, somewhat exceeding the leaves, minutely rough on the angles below the head, aphyllopodic. Leaves with well developed blades 4-7 to a fertile culm, on the lower

third of the culm, somewhat bunched; the blades flat, the upper long-attenuate, 1.5–3 mm. wide, 12–25 mm. long, minutely rough on the edges; lower sheaths without blades light brown, sheaths overlapping; ventral band hyaline, white or light-green. Heads ovoid, 13–20 mm. long; spikes 3–5, closely aggregated, gynaeandrous, 8–11 mm. long, 4–8 mm. wide, rounded at base, rounded or somewhat pointed at apex. Bracts scale-like, with brown center and broad white hyaline margin, shorter than the head, the lowest frequently stiff and attenuated. Scales ovate, blunt, about as long and broad as the perigynia, chestnut-brown with white hyaline margin especially well marked in the staminate and lower pistillate scales. Perigynia hidden by the scales, ascending, dark brown at maturity, dull obscurely nerved on both faces, winged, ovate, 4.5–5.25 mm. long, 2–2.25 mm. wide, broadest near the top of the achene, contracted at base, sessile, rather abruptly contracted into a flat winged bidentate beak serrulate to the tip; teeth erect 1 mm. long. Achenes oval, 2 mm. long, 1.2 mm. wide, light brown and dull at maturity, substipitate; style slender; stigmas 2.

The above description is based on plants found growing abundantly in dry soil at an elevation of 3550 m., 200 m. above the timber line, on Mt. Arapahoe, Boulder County, Colorado. My number 3227, preserved in my herbarium, is designated as the type. At the type-locality are found *Carex albo-nigra* Mack. and *C. ellynoides* Holm.

CAREX **subimpressa**, spec. nov. "*Carex impressa* (Wright) Mackenzie \times *Carex lanuginosa*, Michx." Clokey, *Torreyia*, vol. 16, no. 9, Sept., 1916.

This hybrid has become so well established and shows such vigor, having become more abundant than either parent at the type locality, that it should be given rank as a species. My number 2338, preserved in my herbarium, is designated as the type.

CAREX TRIBULOIDES, Wahl. var. **sangamonensis**, var. nov. Growing in small clumps from short stout rootstocks. Culms 2.2–6.5 dm. high, slender, soft, sharply angled, very slightly rough on the edges just below the head, about the length of the leaves of the fertile culms. Leaves on the fertile culm 4–8, on the sterile very numerous, 1.5–4 mm. wide, scattered, soft, flat, ribbon-like, gradually tapering to a delicate point, rough on the edges, those of the sterile culms frequently much longer than the fertile culms. Sheaths overlapping, lowest somewhat fibrillose at base. Inflorescence erect or somewhat flexuous, 2–4.2 cm. long; spikes 4–6. occasionally 3 or 7 and rarely 8, dull green or straw-color, sessile, obovoid, blunt, slightly to decidedly

clavate at base, 6-12 mm. long including staminate part (frequently constituting one third or more of the longer spikes), 3-6 mm. wide, irregularly separated to approximate. Bracts absent or the lower 1-3 present, setaceous, shorter or longer than the head. Staminate flowers basal. Perigynia 3-4 mm. long .9-1.25 mm. wide, straw-colored over achene, rest light green to straw-color, thin, scale-like, scarcely distended over the achene, several-nerved on each face, straight, tapering to slightly cleft apex, without well-marked beak. Achene 1-1.25 mm. long, .67-.75 mm. wide, dull straw-color, lenticular, elliptical, short-stipitate; style slender. Scale white-hyaline with green midrib to uniform straw-color, acute, .67-.75 the length of the perigynia, narrower than the perigynia. Stigmas 2.

This well marked plant is found growing in rich alluvial soil in two small widely separated areas in Macon County, Illinois. My number 2364, preserved in my herbarium, is designated as the type. My number 2362 also belongs here. At the type-locality the plant is found growing with *Carex Leavenworthii* Dewey, and *C. muskingumensis* Schwein. It may be separated from the typical form of *C. tribuloides* Wahl., and from Bailey's varieties *turbata* and *reducta* by the following key.

Spikes 3-7; leaves 1.5-4 mm. broad. *C. tribuloides*, v. *sangamonensis*.
 Spikes 8-14; leaves 3-8 mm. broad.

Perigynia with appressed tips.

Inflorescence moniliform, spikes scattered. . . . *C. tribuloides*, v. *turbata*.

Inflorescence cylindric, spikes approximate. . . . *C. tribuloides* (typical).

Perigynia with spreading tips, inflorescence flexuous.

C. tribuloides, v. *reducta*.

Var. *sangamonensis* is in some respects between varieties *turbata* and *reducta*, in others different from all other forms of the species. A large number of specimens show that the tips of the perigynia are frequently straight with the perigynia slightly spreading, not appressed as in var. *turbata*, nor recurved as in var. *reducta*. Many of the heads show a flexuous inflorescence with decidedly separated spikes. The small number of spikes is a regular thing, not an exception. Out of several hundred plants carefully examined, only 2-3 heads were found with 8 spikes, a relatively small number with 3 or 7 spikes, and probably over 90% with 4-6 spikes. Another point of difference is in the perigynia which, when fully mature, measure 3-4 mm. with the average of 3.5 mm. long.

DENVER, COLORADO.

PLANS FOR 1919 SPRING FIELD TRIP OF THE NEW ENGLAND BOTANICAL CLUB.

DURING the war the field trips of the New England Botanical Club were temporarily abandoned, the last trip two years ago at the time of great financial demands having an attendance of only four members. Now that more settled conditions are in prospect it is proposed to renew these week-end explorations, which have proved so effective in the past in largely increasing our detailed knowledge of local distribution and in affording a remarkable opportunity for many members who enjoy good botanizing and good comradeship to coöperate.

This spring it is proposed to spend Friday, Saturday, and for those who wish it, Sunday, May 30, 31, and June 1, intensively exploring the spring and early summer flora of southwestern Massachusetts. The proposition is to gather at Pittsfield Thursday evening, when plans for the active field work will be clearly formulated. As in the past, the party will be divided into groups of two or three and assigned definite tracts of southern Berkshire County to explore. Each party is held responsible for the collection of every vascular plant in recognizable condition in the area assigned, a full series of these plants to be turned in to the New England Botanical Club to add to its detailed representation. At the end of the trip each member of the party will be asked to supply to the phaenogamic curator the proper data for label-forms and indication of the number of labels needed and these printed label-forms will be supplied to each member.

Southern Berkshire is somewhat known in midsummer but only very limited areas have been botanized in late spring. The present season with *Hepatica*, *Epigaea*, and others of the earliest flowers expanded in March, promises to be unusually early, so that at the end of May the Berkshire party will find all the interesting material it can care for. The members should take an abundant supply of specimen-papers in which to lay out their daily collections and those who wish naturally will take a supply of driers. By laying out the specimens in pressing paper without many driers the plants can be kept in reasonably good condition for two or three days until the return home, when they will be in condition for final straightening and drying.

The particular object of the late spring exploration of southern Berkshire, besides enjoying the best botanizing to be found in the temperate sections of New England, is to search for the many scores of species which closely approach the Massachusetts border from the west or southwest but which are not yet definitely known within the limits of the state. The region of Berkshire County is geographically and geologically so closely allied to Litchfield County, Ct., to Dutchess and Columbia Counties, N. Y., and to Bennington County, Vt., that

plants which are found in these adjacent counties should certainly be expected in Berkshire County. The list of such species is, as intimated, a large one and from it there have been selected the following easily recognized plants which approach southwestern Berkshire County very closely, some of them being found within one mile of our border and all within a distance of ten, or in a few cases only twelve or fifteen miles, from Mount Washington or Sheffield.

TRIGLOCHIN PALUSTRIS, marshes, Pine Plains, N. Y. (Characteristic of calcareous marshes throughout the Canadian zone but in New England known only from Maine.)

ERIOPHORUM ANGUSTIFOLIUM, peat bogs, Pine Plains, N. Y. (One of the early species, maturing in Maine during May and early June but in New England unknown except in Maine.)

RYNCHOSPORA CAPILLACEA, abundant in calcareous marshes at Pine Plains, N. Y.; also at Salisbury, Ct., and on limy ledges in Vermont. (In northern Maine this species is in recognizable condition during June, although it matures later.)

CAREX CRAWEI, moist fields and meadows, Salisbury, Ct. and somewhat frequent in the calcareous regions of central and western New York; also in the limy soils of Aroostook County, Maine.

CAREX CASTANEA, alluvial soils and meadows, Salisbury, Ct.; also in Vermont and common in the calcareous regions of Maine.

WOLFFIA COLUMBIANA, surfaces of ponds and pools, Salisbury, Ct. (The tiniest of the *Lemnaceae*, the minute plants floating just at the surface of the water and without rootlets.)

JUGLANS NIGRA, indigenous at North Canaan, Ct. (Reported but unverified from western Massachusetts.)

MORUS RUBRA, frequent in mountain woods, Dutchess County, N. Y.; Salisbury, Ct.; also in southwestern Bennington County, Vt. (Reported but unverified in Massachusetts.)

RANUNCULUS CIRCINATUS, ponds and streams, Salisbury, Ct.; also in Vermont.

TROLLIUS LAXUS, swampy woods and meadows, Cornwall, Ct. (Reported but unverified from the Connecticut Valley in New Hampshire; also from Maine.)

CORYDALIS AUREA, frequent on limestone cliffs and in rocky woods, Dutchess County, N. Y.; also in western Vermont.

HEUCHERA AMERICANA, wooded banks of the Housatonic, Litchfield County, Ct.

RIBES ROTUNDIFOLIUM, rocky woods and hillsides, Dutchess County N. Y.; and Salisbury, Ct.

HYBANTHUS CONCOLOR (Green Violet), very abundant in May "in a cold mountainous woods about a mile from the village of Pine Plains. It was growing very luxuriously — many of the stems being all of three feet in height — and covered several acres of ground almost to the exclusion of other herbaceous plants."

ZIZIA CORDATA "rather common in all our open woods," Pine Plains; also at various stations in Connecticut.

TAENIDIA INTEGERRIMA, frequent in gravelly or rocky woods, Dutchess County, N. Y.; wooded banks of Housatonic River, Ct.; also in western Vermont.

POLEMONIUM VAN BRUNTIAE, swamps, Salisbury, Ct.; also western Vermont.

VALERIANA ULIGINOSA "very abundant in some of the marshes and swamps about Pine Plains," over an area 12 miles in diameter, one of the stations within three miles of the Massachusetts-Connecticut line, growing in swamps with *Salix candida* and *Betula pumila*; also locally in Vermont. (Abundant in the calcareous swamps of northern Maine and locally across central and western New York.)

Surely some, if not all, of these characteristic plants of the calcareous regions are to be found in Berkshire County. All of them are in good condition for collecting in late May or June and a party of 15 or 20 enthusiastic explorers should in two or three days of active raking of southern Berkshire bring them to light. The best regions are naturally the least accessible by railroad or trolley, consequently, it is hoped that those who have automobiles will feel ready to put them at the disposal of the Club in order to reach the more remote areas away from railroads.

A notice stating the headquarters of the Club for this trip and other details as to times of trains, etc., will be prepared later. All who wish this final notice should notify R. C. BEAN, 48 Emerson Street, Wakefield, Mass.

M. L. FERNALD, <i>Chairman</i>	} <i>Committee on</i>
R. C. BEAN	
C. H. KNOWLTON	
	} <i>Field Excursions.</i>

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